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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,458	01/16/2004	Christian Knopfle	60,500-116	7719
27305	7590	02/24/2006	EXAMINER	
HOWARD & HOWARD ATTORNEYS, P.C. THE PINEHURST OFFICE CENTER, SUITE #101 39400 WOODWARD AVENUE BLOOMFIELD HILLS, MI 48304-5151			REIS, TRAVIS M	
			ART UNIT	PAPER NUMBER
			2859	

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/759,458

Applicant(s)

KNOPFLE ET AL.

Examiner

Travis M. Reis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/5/6.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 & 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hite (U.S. Patent 3230628) in view of Moe (U.S. Patent 2981005).

Hite discloses a measuring device for bone screws (15), as shown in Figures 1-3, the device comprising a surface (10), a length measuring scale (28) defined at the opening for measuring the screws; & a receiving groove (12) defined in the surface for receiving bone screws.

Hite does not disclose multiple openings with different opening cross-sections; a limit stop associated with each of the openings for cooperating with a received bolt, the opening and the associated limit stop having a selectivity with respect to the shaft diameter of the bolt which can be received in the opening; wherein the opening has an open end in the area of a face of the device, said face running essentially vertically to the surface; wherein the limit stop is arranged in the region of the face or is formed from the face; wherein the limit stop is formed to cooperate with the underside of a bolt head; wherein the limit stop has, opposite each other, two limiting elements projecting upwardly from the surface, defining a channel between the two limiting elements extending downwardly below the surface, the two limiting elements having a spacing between each other that defines the selectivity; and wherein the opening has an open angle range with reference to the surface, with respect to an axis of symmetry which runs along its axial extension; wherein the bone screw has differently formed or dimensioned transitions

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from screw shaft to a screw head.

Moe discloses a bolt gauge, as shown in Figures 1-3, with multiple openings (14—28) with different opening cross-sections, a limit stop (12, see below),



associated with each of the openings for cooperating with a received bolt, the opening and the associated limit stop having a selectivity with respect to the shaft diameter of the bolt which can be received in the opening; wherein the opening has an open end in the area of a face of the device, said face running essentially vertically to the surface; wherein the limit stop is arranged in the region of the face or is formed from the face; wherein the limit stop is formed to cooperate with the underside of a bolt head; wherein the limit stop has, opposite each other, two limiting elements projecting upwardly from the surface, defining a channel between the two limiting elements, the two limiting elements having a spacing between each other that defines the selectivity; and wherein the opening has an open angle range with reference to the surface, with respect to an axis of symmetry which runs along its axial extension; wherein the bolt has differently formed or dimensioned transitions from bolt shaft to a bolt head. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to make the gauge disclosed by Hite with multiple openings, each opening capable of accepting a screw with a different size as disclosed by Moe, in order to be able to ^{readily} measure screws with different diameters as well as different lengths. Once the device is modified each opening will have a corresponding groove ^{and} of respective length measuring scales. Furthermore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the limit stops disclosed by Moe to the surface disclosed by Hite at the region of the groove where the head is fitted in order to hold the screws in place while said screws are being gauged.

Once the device is modified the channel will extend downwardly below the surface as a result of the modification because Figure 3 of Hite shows the groove below the surface.

With respect to the specific open angle range of the receiving grooves, i.e., between 20 and 240 degrees and less than approximately 175 degrees: Hite as modified by Moe disclose a measuring device for measuring bone screws of different shaft diameters, said device having receiving grooves having an open angle range with reference to the surface, with respect to an axis of symmetry which runs along their axial extension. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the "optimum range" involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to provide the grooves disclosed by Hite as modified by Moe with an open angle of between 20 and 240 degrees, and less than approximately 175 degrees, as claimed by applicant, in order to properly support the bone screws.

3. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hite & Moe as applied to claims 1-6 & 8-11 above, and further in view of DiCarlo (U.S. Patent 5180388).

Hite as modified by Moe disclose all of the instant claimed invention as stated above in the rejection of claims 1-6 & 8-11 but do not disclose a bone drill, information about a current drilling depth attached to the drill and corresponding information on the measuring device, and the information about the drilling depth including a color scale.

With respect to the bone drill, the information about a current drilling depth attached to the drill and corresponding information on the measuring device, and the information about the drilling depth including a color scale: DiCarlo discloses a device, as shown in Figure 1, having a bone drill (30) insertable to different depths into a bone (40) wherein information about

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a current drilling depth is attached to the bone drill and corresponding information (22) is provided on a device (20), and wherein information about the drilling depth includes a color scale (col. 2 lines 66-68 and col. 3 lines 1-5). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add a bone drill as taught by DiCarlo to the device disclosed by Hite as modified by Moe in order to provide the user with an accessible bone drill to be used during surgery. Once the modification is made, i.e., the bone drill is located on a surface of the measuring device disclosed by Hite as modified by Moe, the information will be on the measuring device.

Response to Arguments

4. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

5. In response to applicant's arguments that both Hite & Moe fail to disclose multiple receiving grooves; these arguments have been fully considered but they are not persuasive since Moe has multiple opening for receiving bolts, and when combined with the grooves disclosed by Hite, will provide multiple receiving grooves, as detailed above in paragraph 2.

6. In response to applicant's arguments that neither Hite, nor Moe disclose limit stops with two limiting elements that define a channel between the limiting elements that extend downwardly below the surface; these arguments have been fully considered but they are not persuasive since this limitation is met by the obvious combination of Moe & Hite, as detailed above in paragraph 2.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis M. Reis whose telephone number is (571) 272-2249. The examiner can normally be reached on 8--5 M--F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Travis M Reis
Examiner
Art Unit 2859



Diego Gutierrez
Supervisory Patent Examiner
Tech Center 2800

tmr
February 21, 2006